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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/623,857 | 07/22/2003 | Jun Koyama | 740756-2633 | 6363 |

22204 7590 12/14/2005

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EXAMINER

LUI, DONNA V

| | |
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| ART UNIT | PAPER NUMBER |
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2675

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/623,857

Applicant(s)

KOYAMA ET AL.

Examiner

Donna V. Lui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,7-9,13,14,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) 4-6,10-12,15,16,19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-3,7-9,13,14,17 and 18 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species A in the reply filed on November 18, 2005 is acknowledged. The traversal is on the ground(s) that figure 1 and figure 2 are not directed to independent species of the invention depicting embodiments that have mutually exclusive features, further citing that figure 1 is generic to figure 2. This is not found persuasive because figure 1 is not generic to figure 2 such that figure 1 does not include the D/A conversion circuit within the correction unit nor does it include the power supply.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Ex Parte Quayle Action

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following is a suggested title:
Drive Method Having Aging and Temperature Compensation.

Drawings

5. The drawings are objected to because figures 8A-8B and figure 9 need to be labeled "Related Arts". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Kwasnick (Pub. No.: 2003/0048243) is cited to teach an organic light emitting display having a temperature detection unit, and a correction unit for correcting the integrated charge due to the lifetime (age) of the display and the impact of temperature. Kwasnick does not teach a storage unit for temperature and aging characteristics, a count unit for counting a cumulated lighting period, an arithmetic operation unit for calculating a lighting period using the temperature characteristic, detected temperature and video signal, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

b. Everitt (Patent No.: 6,963,321) is cited to teach a storage unit for differential aging effects of the OLED element. Everitt does not teach a temperature detection unit, a storage unit containing temperature characteristics, a count unit for counting a cumulated lighting period, an arithmetic operation unit for calculating a lighting period using the temperature characteristic, detected temperature and video signal, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

c. LeChevalier (Pub. No.: 2004/0004590) is cited to teach a count unit which counts the exposure clock edges which determines the exposure period (lighting period) for an OLED display due to aging and temperature. LeChevalier does not teach a temperature detection unit, a storage unit containing temperature and aging characteristics, nor a

correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

d. Feldman (Patent No.: 6,501,230) is cited to teach a storage unit for digital aging correction values for an OLED display. Feldman does not teach a temperature detection unit, a storage unit containing temperature characteristics, a count unit for counting a cumulated lighting period, an arithmetic operation unit for calculating a lighting period using the temperature characteristic, detected temperature and video signal, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

e. Yasue (Patent No.: 6,806,871) is cited to teach a driver IC for electro-optical elements for temperature compensation. Yasue teaches a temperature detection unit, a storage unit for the temperature characteristics, and a counter unit for counting the clocks from the frequency dividing circuit. Yasue does not teach a storage unit for aging characteristics, a count unit for counting a cumulated lighting period, an arithmetic operation unit for calculating a lighting period using the temperature characteristic, detected temperature and video signal, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

f. Wakahara Toshio et al. (Pub. No.: JP 2001-134197) is cited to teach a temperature compensating device for counting the duration of a lighting period to determine the temperature. Wakahara teaches a temperature detection unit, and a memory for storing data of the display due to temperature variations. Wakahara does not teach a storage unit for aging characteristics, an arithmetic operation unit for calculating a lighting period

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using the temperature characteristic, detected temperature and video signal, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

g. Krah et al. (Patent No.: 6,753,856) is cited to teach display correction to compensate for aging and environmental changes using a non-volatile memory for storing display characteristics during initial manufacture. Krah does not teach an arithmetic operation unit for calculating a lighting period using the temperature characteristic, detected temperature and video signal, a count unit for counting a cumulated lighting period, an arithmetic operation unit for calculating a lighting period using the temperature characteristic, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

7. Claims 4-6, 10-12, 15-16, and 19-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species B, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 18, 2005.

8. This application contains claims 4-6, 10-12, 15-16, and 19-20 drawn to an invention nonelected with traverse in applicant's reply filed on November 18, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

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9. This application is in condition for allowance except for the following formal matters:

Minor informalities to the application as stated above under the headings specification and drawings.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

10. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna V. Lui whose telephone number is (571) 272-4920. The examiner can normally be reached on Monday, through Friday 8:30 a.m. - 5:00 p.m..

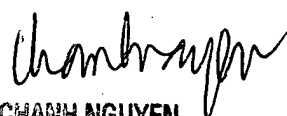
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donna V Lui

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Examiner
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CHANH NGUYEN
PRIMARY EXAMINER